

LISTING OF THE CLAIMS

1. (Previously presented) A system for noninvasive measuring of a conductivity in a volume, said system comprising:

magnetic means arranged as a resonant circuit, said magnetic means being arranged to induce an oscillating magnetic field in said volume; and

power supply means connectable to said magnetic means, said power supply means being arranged to provide a signal characteristic to a power loss of said resonant circuit upon an application of said magnetic field to said volume, wherein the magnetic means are integrated into an insulating fabric carrier.

2. (Previously presented) The system according to claim 1, wherein the system comprises further magnetic means arranged as a further resonant circuit, said further magnetic means being arranged in a vicinity of a further volume in order to provide a reference signal.

3. (Previously presented) A system for monitoring a condition of a user, said system comprising:

- a sensor arranged to be located in a vicinity of a target volume of the user for detecting information representative to the user's condition, said sensor comprising:

- a resonant circuit that induces an oscillating magnetic field in said target volume, wherein the resonant circuit is integrated into an insulating fabric carrier,

- a power supply that provides a signal characteristic to a power loss of said resonant circuit upon an application of said oscillating magnetic field to said target volume, and

- a detector actuatable by said sensor to process said signal in order to derive said information.

4. (Previously presented) The system according to claim 3, wherein the insulating fabric carrier is a part of clothing.

5. (Previously presented) The system according to claim 3, wherein the insulating fabric carrier is a part of a bed sheet.

6. (Previously presented) The system according to claim 3, wherein the insulating fabric carrier is a part of a safety belt.

7. (Previously presented) The system according to claim 3, wherein the insulating fabric carrier is a part of a furniture piece.

8. (Previously presented) The system according to claim 3, wherein the system comprises a further sensor located in a vicinity of a further volume in order to provide a reference signal.

9. (Previously presented) The system according to claim 8, wherein the further sensor comprises a resonant circuit to induce an oscillating magnetic field in said further volume.

10. (Previously presented) The system according to claim 9, wherein the target volume comprises a heart of the user.

11. (Previously presented) An alarm system arranged for alarming upon a disorder in a condition of a user, said alarm system comprising:

- a sensor located in a vicinity of a target volume of the user for detecting information representative to the user's condition, said sensor comprising a resonant circuit to induce an oscillating magnetic field in said target volume, wherein the resonant circuit is integrated into an insulating fabric carrier,
- a power supply connectable to said sensor to provide a signal characteristic to a power loss of said resonant circuit upon an application of said oscillating magnetic field to said target volume,
- a detector actuatable by said sensor to process said signal in order to derive said information, and

- an alarm actuatable by the detector to trigger an alarm signal upon detection of said information by the detection means.

12. (Previously presented) The alarm system according to claim 11, said alarm system comprising a transmitter to transmit the alarm signal to a remote station responsive to said alarm signal.

13. (Previously presented) The alarm system according to claim 12, said alarm system comprising a sensor, said sensor comprising a resonant circuit to induce an oscillating magnetic field in a volume under investigation and to be connectable to a power supply, said sensor being integrated into an insulating fabric carrier.

14. (Previously presented) The sensor according to claim 12, wherein said fabric carrier comprises threads of fabric, wherein the resonant circuit comprises a loop of a conductive material, said conductive material being interwoven with said threads of fabric.

15. (Previously presented) The system according to claim 1, wherein the resonant circuit further comprises a feedback loop arranged so that a voltage controlling an amplitude of the resonant circuit is proportional to a radio frequency power delivered by the resonant circuit.

16. (Previously presented) The system according to claim 15, wherein the resonant circuit further comprises a plurality of resonant circuits further comprising a plurality of feedback loops.

17. (Previously presented) The system according to claim 3, wherein the oscillating magnetic field in the target volume is an eddy current which generate a secondary magnetic field pointing in the opposite direction with respect to a primary magnetic field produced by the resonant circuit.

18. (Previously presented) The system according to claim 17, wherein the secondary magnetic field induces an electromotive force in the magnetic means, said electromotive force having a phase which is 180° relative to a driving current circulating through the resonant circuit.
19. (Previously presented) The alarm system according to claim 11, wherein the detector further comprises a preamplifier, a processing circuit and an analogue-to-digital converter.
20. (Previously presented) The alarm system according to claim 11, wherein the detector further comprises a sensor signal interpretation unit which derives a feature characteristic from a plurality of characteristics of the signal, wherein the feature characteristic is an abnormal physiological condition of a user.